



Model AX-500 Owner's Manual

4 Button Remote Security System with Dual Stage Shock Sensor

IMPORTANT ! In order to provide the highest possible level of security to your vehicle, this system is equipped with selectable manual override circuitry. It is possible that you will need to manually override your security system if the transmitter becomes lost, or inoperative due to battery failure. Reading the sections on "**MANUALLY OVERRIDING YOUR SYSTEM**" is necessary to fully understand the procedure required to enable your vehicle in such situations. In addition, the chart on the last page of this manual has a section for the particular features and options installed in your vehicle as well as the override method selected. **Valet Switch manual override is pre-selected from the factory**, however, the system can be configured for "Custom Code" operation. Confirm the override mode selected on the last page of this manual, and familiarize yourself with the selection on it's operation.

FEATURES :

- 2 Four Button Programmable RF Transmitters (capable of accepting 4 transmitters)
- Five Channel Receiver
- Code Hopping Technology
- Selectable Manual Override Mode
- Remote Panic in all modes
- Protected Valet
- User Programmable Manual Override Code
- 7 Function LED (Light Emitting Diode) - Arm / Disarm / Zone 1, 2, 3 / Valet / Arming
- Intrusion Alert with Memory
- Audible Arm / Disarm / Defective Zone / Tamper Confirmation
- Instant Siren Activation
- Starter Disable
- Additional Engine Immobilizer Output (optional relay required)
- True Last Door Arming (hardwire only)
- Defective Zone By-Pass
- Hardwire or Voltage Sense Selectable
- Active or Passive Arming Selectable
- Programmable Auto Lock On / Off
- Programmable Auto Unlock On / Off
- Programmable Door Lock Pulse Duration 1 Second / 3.5 Seconds/1 Sec L/ Dbl. U/L
- Programmable Active or Passive Door Locks
- User Programmable Permanent Chirp Delete
- On Command RF Chirp Delete from Transmitter
- 6 Tone Multi Tone Siren
- RF Inhibit with ignition on
- Parking Light Flasher
- Plug In Dual Stage Shock Sensor

OPTIONS:

- Remote Trunk Release (must have electronic trunk release)
- Remote Keyless Entry (must have power door locks)
- Multiple Vehicle Capable
- Remote Starter
- Remote Power Window Roll Up
- Remote Garage Door Interface
- Two Step Unlock Configurable
- Headlight Illumination During Arming, Disarming, Or Both
- Interior Illumination Upon Disarm

YOUR " Code Hopping " TRANSMITTERS

The transmitters included with your new security system use the most advanced and secure form of radio frequency transmission available on any current automotive security system. Some of today's sophisticated auto thieves use a device known as a code grabber, which will receive and store the signal from your keychain transmitter, and retransmit at a later time to disarm your system.

Your anti code hopping transmitters will change their signal every time the button is pressed, so when a thief grabs then retransmits your signal, the alarm system *will not* respond.

If your transmitter button is pressed more than fifty times while it is out of range of the vehicle (children playing with your keys), the transmitter will not operate when you return to the vehicle and will need to be realigned to the receiver. To do this, simply press the lock button two times within a one second time period. The system will now respond to that transmitter each time a button is pressed.

NOTE: Your system has the option of using a siren, the vehicle horn, or both for the sounding device. Where the siren is referenced below, the horn or both may in fact chirp, or beep.

ARMING THE SYSTEM - ACTIVE

1. Turn off the engine, exit the vehicle and close all doors, hood lid and trunk lid.
2. Press and release the Lock button on the keychain transmitter.

Dash mounted LED begins to flash slowly.

Parking Lights flash one time.

Siren sounds one chirp.

If the siren/horn sounds 3 chirps, then you have left a door, trunk, or hood lid ajar. Simply close the opened entry point to provide full protection. If the siren "chirped" three times, sometime after arming, the exclusive delayed dome light learn circuit has been programmed and the system detected a open entry point after the learned delay expired. Again, closing the hood, trunk, or doors will correct the problem and you do not need to disarm the system to make the correction. If the siren/horn did not sound when arming, then the chirps have been turned off and you should refer to the section titled "ELIMINATING THE ARM/DIS-ARM CHIRPS" in this manual.

Doors Lock - Optional

Headlight Illumination - Optional

SILENT ARMING - ACTIVE

1. Turn off the engine, exit the vehicle, and close all doors, hood lid, and trunk lid.
2. Press and hold the Lock button on the keychain transmitter for 2 seconds.

Dash mounted LED begins to flash slowly.

Parking Lights flash one time.

Siren will not sound.

If the siren "chirped" three times, sometime after arming, the exclusive delayed dome light learn circuit has been programmed and the system detected a open entry point after the learned delay expired. Closing the hood, trunk, or doors will correct the problem and you do not need to

disarm the system to make the correction.

Doors Lock - Optional

Headlight Illumination - Optional

ARMING THE SYSTEM - PASSIVE (AUTOMATIC)

1. Turn off the engine, exit the vehicle, and close and lock all doors, hood lid and trunk lid.

Dash mounted LED begins to flash rapidly, indicating 30 second passive arming has begun.

2. Opening any protected entry point during the 30 second passive arming cycle will immediately suspend automatic arming and the 30 second passive arming cycle will restart when all doors are closed. At the end of the passive arming cycle;

Dash mounted LED begins to flash slowly.

Parking Lights flash one time.

Siren sounds one chirp

If the siren did not sound when arming, then the chirps have been turned off, and you should refer to the section titled "ELIMINATING THE ARM / DISARM CHIRPS" in this manual.

Doors Lock - Optional

Door locking during passive arming is a selectable feature.

The alarm can be programmed to allow the doors to lock only when arming using the keychain transmitter and they will not automatically lock during passive arming.

PROTECTION WHILE THE SYSTEM IS ARMED

Opening any protected door, hood, or trunk lid will cause the alarm to immediately sound. The alarm will continue to sound for 30 seconds, then stop and continue to monitor all protected entry points. If the thief left a door opened, the alarm will sound for six 30 second cycles, remain armed and ignore that triggered zone.

Whenever the system is armed, the dash mounted LED indicator will slowly flash. This serves as a visual deterrent to the potential thief. The LED is a very low current bulb and will not cause the vehicle's battery to drain, even when left unattended for extended periods.

Whenever the system is triggered, the vehicle's parking lights will flash for the full 30 second alarm cycle, attracting visual attention to the vehicle.

Optional - Whenever the system is armed, the vehicle's starting circuit will be bypassed. If the thief should choose to ignore the siren, the vehicle can not be started.

Any mild impact to the vehicle's glass will cause the alarm to sound a short series of warning tones.

Any strong impact to the vehicle's glass will cause the alarm to trigger for the full 30 second alarm cycle.

DISARMING THE SYSTEM

1. As you approach the vehicle, press and release the Unlock button on the key-chain transmitter.

Dash mounted LED turns off.

If passive arming was selected during the installation, then the LED will start flashing rapidly, indicating that the system is rearming automatically. Open any door to suspend the automatic arming.

Parking Lights flash two times.

If the parking lights flashed three times, then the alarm was triggered in your absence. Before turning the key on, examine the LED to identify which zone was triggered.

Siren sounds two chirps.

If the siren sounds 4 chirps, then the alarm was triggered in your absence. Before turning the key on, examine the LED and refer to the INTRUSION WARNING SIGNALS section of this manual to identify which zone was triggered.

If the siren did not sound when disarming, then the chirps have been turned off, and you should refer to the section titled "ELIMINATING THE ARM / DISARM CHIRPS" in this manual.

Doors Unlock - Optional

Note: If the optional 2 step door unlock circuit is installed, when the unlock transmitter button is activated, the drivers door only will unlock, pressing the unlock button a second time will cause all doors to unlock. If your transmitter has a separate lock unlock buttons, pressing the unlock button anytime after the first unlock command will cause all the vehicle doors to unlock.

Headlight Illumination - Optional

Illuminated Entry Upon Disarm

SILENT DISARMING

1. As you approach the vehicle, press and hold the Unlock button on the keychain transmitter for 2 seconds.

Dash mounted LED turns off.

If passive arming was selected during the installation, then the LED will start flashing rapidly, indicating that the system is rearming automatically. Open any door to suspend the automatic arming.

Parking Lights flash two times.

If the parking lights flashed three times, then the alarm was triggered in your absence. Before turning the key on, examine the LED to identify which zone was triggered.

Siren will not sound.

If the siren sounds 4 chirps, then the alarm was triggered in your absence. Before turning the key on, examine the LED and refer to the INTRUSION WARNING SIGNALS section of this manual to identify which zone was triggered.

Doors Unlock - Optional

Note: If the optional 2 step door unlock circuit is installed, when the unlock

transmitter button is activated, the drivers door only will unlock, pressing the unlock button a second time will cause all doors to unlock. If your transmitter has a separate lock/unlock buttons, pressing the unlock button anytime after the first unlock command will cause all the vehicle doors to unlock.

Headlight Illumination - Optional
Illuminated Entry Upon Disarm

WHILE THE SYSTEM IS SOUNDING

If during a triggered state, you wish to shut off the siren without disarming your security system, simply press and release any transmitter button other than the disarm button. This action will turn off the siren yet leave the vehicle fully armed and protected. This feature is particularly useful if you are aware of children playing near your vehicle that may accidentally trigger your security system. In this case you can cancel the siren sounding without disarming your alarm.

INTRUSION WARNING SIGNALS

This system will inform you if an intrusion attempt has occurred while you were away from the vehicle. If an intrusion attempt has occurred, the siren will chirp 4 times and the parking lights will flash 3 times when disarming the system. Enter the vehicle and observe the dash mounted LED to identify which zone was triggered.

If the LED is flashing one time...pause...one time...pause...etc., then an intrusion attempt was made to the shock sensor, or an accessory triggering device that may have been added to the system.

If the LED is flashing two times...pause...two times...pause...etc., then an intrusion attempt was made to a hood or trunk pin switch that was added to the system, or to a light activated entry point if the alarm was installed using the voltage sensing feature.

If the LED is flashing three times...pause...three times...pause...etc., then an intrusion attempt was made through one of the vehicle's doors.

These intrusion warning indicators are stored in the system's memory and will only be erased when the ignition key is turned on.

VALET SWITCH

The valet switch allows you to temporarily bypass all alarm functions, eliminating the need to hand your transmitter to parking attendants or garage mechanics. When the system is in valet mode, all alarm functions are bypassed, however the remote panic feature and remote door locks will remain operational. To use the valet mode, the system must first be disarmed either by using your keychain transmitter, or by operating the manual override sequence.

1. From the disarmed condition, turn the ignition key to the on position.
2. Press and hold the valet pushbutton switch until the dash mounted LED, turns on. The LED will remain on as long as the system is in valet mode.
3. To return to normal operation, press and release the push button switch any time the ignition is on.

NOTE: Always remember to return the system to the NON VALET mode, after servicing, to ensure that the vehicle remains protected at all times.

**MANUALLY OVERRIDING YOUR SYSTEM:
USING THE VALET SWITCH MANUAL OVERRIDE**

Your Security System can be disarmed without the use of the keychain transmitter. This is necessary, since you will need the ability to operate your vehicle if the transmitter is lost or its battery fails. If your system has been selected for Valet Switch manual override as indicated on the last page of this manual, to bypass the alarm system.

1. Open the vehicle door. The alarm will sound.
2. Turn the ignition key to the on position.
3. Within 5 seconds, press and release the valet push button switch.

The alarm system will stop sounding and enter the disarmed mode. You can now start and operate the vehicle normally.

Typically this override mode is used only if the transmitter has become inoperative. You may elect to enter the VALET mode until repair or replacement of the transmitter, after which, returning the system to the full operation mode is necessary. To do so, see item 3 under the heading VALET SWITCH.

Programming Your Custom Override Code:

Unlike override switches easily found, and defeated, this security system allows the consumer to program a personal override code, offering a higher level of security. To take advantage of this option, programmable feature # 10 must be selected for the Custom Code Option. Consult your installation center for programming details. The system comes from the factory with a pre-programmed override code of 11. To change this default override code, do the following:

1. Disarm the system by use of the transmitter, or by use of the emergency override sequence. Turn the ignition switch to the on position.
2. Within 10 seconds, press and release the valet/override switch, 3 times.
3. Within 10 seconds turn the ignition switch off, on, off, on, off, on.
(The siren or horn will beep and the lights will flash one time.)
4. Within 10 seconds, begin to enter your chosen 10ths digit by pressing and releasing the pushbutton switch from 1 up to 9 times.
5. Within 10 seconds of the last entered 10ths digit, turn the ignition switch off then on.
6. Within 10 seconds, begin to enter your chosen units digit by pressing and releasing the pushbutton switch from 1 up to 9 times.
7. Finish by turning the ignition switch to the off position.

If the new code was accepted, the unit will report back the newly entered code, by flashing the LED, first indicating the 10ths digit, pause and then the units digit. The unit will report the new code three times with a one second pause between each code, then the system will begin arming. If the LED flash pattern reports the previously stored code, the new code was not entered correctly. Please repeat steps 1 through 7 above considering the following.

NOTE: Acceptable digits 10ths or units are 1 through 9. The unit will not recognize a 0 (Zero), or no digit entered in any place, units or tenths.

NOTE: If 15 seconds of inactivity expire, or if the ignition switch is turned off for more than 5 seconds during any of the above steps, the unit will revert back to the last successfully stored code.

Custom Code Programming Example:

To Change the code from the factory preassigned code of 11 to "52" you would do the following:

1. Disarm the system by use of the transmitter, or by use of the emergency override sequence.
2. Turn the ignition switch to the on position.
3. Within 10 seconds, press and release the valet/override switch, 3 times.
4. Within 10 seconds turn the ignition switch off, on, off, on, off, on.
(The siren or horn will beep and the lights will flash one time.)
5. Within 10 seconds, begin to press and release the push button switch to set the tenths digit.
(As per the example, press and release 5 times to set the tenths digit to 5)
6. Within 10 seconds of the last press of the pushbutton, turn the ignition switch off then on.
7. Within 10 seconds, begin to press and release the push button switch to set the units digit.
(As per the example, press and release 2 times to set the units digit to 2).
8. Turn the ignition switch to the off position. Immediately observe the LED flash pattern.

You will note the LED flashing five times, pause, and then flash two times, pause. This pattern will be repeated three times indicating the new code (52) has been accepted and stored in memory.

NOTE: If after step 8, the LED flashes a code other than what was just entered, this indicates that the code has not been changed. You will have to repeat steps 1 through 7 above being certain to note the following:

Acceptable digits 10ths or units are 1 through 9. The unit will not recognize a 0 (Zero), or no digit entered in any place, units or tenths.

NOTE: If 15 seconds of inactivity expire, or if the ignition switch is turned off for more than 5 seconds during any of the above steps, the unit will revert back to the last successfully stored code.

**MANUALLY OVERRIDING YOUR SYSTEM:
USING THE CUSTOM CODE OVERRIDE**

Assuming the override code programmed has not been changed, and the default override code of 11 is in the system's memory.

- 1) Enter the vehicle and turn the ignition switch to the on position.
Note: The siren will sound.
- 2) Within 5 seconds, press and release the pushbutton switch 1 time.
- 3) Within 5 seconds, turn the ignition switch off then on.
- 4) Within 5 seconds, press and release the pushbutton switch 1 time.
- 5) Turn the ignition switch off then on and start the vehicle.

Note: If you have changed the programmed override code then substitute your new code tenths for step 2 above, and units for step 5 above.

ELIMINATING THE NORMAL ARM / DISARM CHIRPS

As explained earlier in the manual, you can eliminate the chirps selectively any time you arm or disarm the system simply by holding the ARM / DISARM button for two seconds. If you find the normal arming and disarming chirps annoying, they can be turned off permanently, eliminating the need to hold the ARM / DISARM button for two seconds. To do this,

1. Turn the ignition key on then off.
2. Within 10 seconds, press and release the valet push button switch three times.
3. If the chirps were on before you started, then you will hear 2 chirps indicating they have been turned off.

If the chirps were off before you started, then you will hear one chirp indicating they have been turned on.

NOTE: Whenever the chirps are bypassed, the 4 chirp intrusion indicator and 3 chirp defective zone indicator will always operate. Since these are important warnings to you that something has happened, they cannot be eliminated.

REMOTE PANIC OPERATION

The ARM or DISARM button on your keychain transmitter also functions as a panic switch for use in emergency situations. To use remote panic,

1. Press and hold the ARM or DISARM button on the keychain transmitter for 3 or more seconds. The alarm will immediately sound.
2. To stop the alarm, press and hold the ARM or DISARM button on the transmitter again for 3 seconds. If the button is not pressed, the alarm will automatically stop after 30 seconds. Also if any transmitter button other than the ARM or DISARM button is pressed and released, the Panic mode will be turned off immediately. The normal function of this transmitter button will be suspended during the Panic sounding period.
3. During the panic mode, the Lock and Unlock buttons can be used to lock and unlock the doors, (if the option is installed), however once the unlock/disarm button is pressed, the vehicle's starter inhibit device, (where installed) will be disabled allowing the vehicle to start.

NOTE: While in the Panic mode, pressing and releasing the ARM or DISARM buttons will, if the option is installed, lock and unlock the doors respectively. While in the panic mode, anytime the DISARM button is pressed, the panic feature will continue for the allotted 30 seconds, however, the security system will be disarmed allowing the vehicle to start.

ADDITIONAL REMOTE FUNCTION (CHANNEL 2/ACTIVATION OUTPUT)

This security system has an additional features that can be connected to a number of different optional accessories. Some of the more common uses for this channel are;

- | | |
|-----------------------|------------------------------|
| Remote Trunk Release | Remote Car Starter |
| Remote Window Closure | Remote Garage Door Interface |

Operation of the optional accessory or accessories, can be controlled by pressing and holding the programmed button on the keychain transmitter for four seconds, or by pressing and releasing the programmed button on the transmitter two times

in succession. Check with your installation center for more information on what accessories were installed and how they are accessed.

ADDITIONAL REMOTE FUNCTION (CHANNEL 4)

This security system has an additional feature that can be connected to a number of different optional accessories. Some of the more common uses for this channel are:

- | | |
|-----------------------|------------------------------|
| Remote Trunk Release | Remote Car Starter |
| Remote Window Closure | Remote Garage Door Interface |

To activate the optional accessory, press the programmed button on the keychain transmitter for up to 8 seconds for continuous output, or press and release for momentary activation. The optional accessory will immediately engage. Check with your installation center for more information on the optional accessory that may have been installed and how it is accessed.

ADDITIONAL REMOTE FUNCTION (CHANNEL 5)

This security system has an additional feature that can be connected to a number of different optional accessories. Some of the more common uses for this channel are;

- | | |
|-----------------------|------------------------------|
| Remote Trunk Release | Remote Car Starter |
| Remote Window Closure | Remote Garage Door Interface |

To activate the optional accessory, press the programmed button on the keychain transmitter for up to 8 seconds for continuous output, or press and release for momentary activation. The optional accessory will immediately engage. Check with your installation center for more information on the optional accessory that may have been installed and how it is accessed.

IGNITION CONTROLLED LOCK UNLOCK: (Unlock Drivers Only, or Unlock All Doors)

Your security system has a selectable safety feature that allows the vehicle doors to lock when the ignition switch is turned on, (Providing all doors are closed), and to unlock the doors when the ignition switch is turned off. In addition, the unlocking of the doors is further selectable, in a two step unlock configuration, to unlock only the drivers door or all doors.

TELEMATIC UPGRADE:

This system has the ability to have a telematic upgrade module connected to it. This is a upgrade that can give you control of certain functions of your vehicle from a Telephone, or in some cases a computer interface. Please check with your installation center for most recent Telematic Upgrades. If you had a Telematic Upgrade installed, the manual supplied with the upgrade unit will provide a operators manual advising of the features of the system and means available to control these features of your vehicle.

AX-500
SYSTEM FUNCTIONS AT A GLANCE

DASH LED INDICATORS

RAPID FLASHING	=	PASSIVE ARMING
SLOW FLASHING	=	ARMED
OFF	=	DISARMED
ON SOLID	=	VALET MODE
3 FLASH...PAUSE	=	INTRUSION ZONE 3
2 FLASH...PAUSE	=	INTRUSION ZONE 2
1 FLASH...PAUSE	=	INTRUSION ZONE 1

SIREN CHIRP INDICATORS

*1 CHIRP	=	ARM
*2 CHIRPS	=	DISARM
3 CHIRPS	=	ARM / DOOR OPENED
4 CHIRPS	=	DISARM / INTRUSION

* These chirps are optional, and can be de - activated.

PARKING LAMP INDICATORS

1 FLASH	=	ARM
2 FLASHES	=	DISARM
3 FLASHES	=	DISARM / INTRUSION

Your System Has These Features Activated

- Starter Disable
- Remote Keyless Entry
- Auto Lock with ignition key
- Auto Unlock with ignition key
- Passive Arming
- No Lock in passive mode
- Hardwire doors, hood, and trunk
- Custom Code Override
- Valet Switch Override
- Illuminated Entry Upon Disarm

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